

Recursive

```
#include <iostream>
using namespace std;
int fibonacci(int n){
    if(n<=1)
        return n;
    return fibonacci(n-1)+fibonacci(n-2);
}
int main(){
    int n;
    cout<<"Enter a number"<<endl;
    cin>>n;
    cout<<"Result is"<<fibonacci(n);
    return 0;
}
```

OUTPUT:

Enter a number

6

Result is8

Non-Recursive

```
#include <iostream>
using namespace std;
int main(){
    int a=0,b=1,c,n;
    cout<<"Enter a number"<<endl;
    cin>>n;
    for(int i=2;i<=n;i++){
        c=a+b;
        cout<<c<<" ";
        a=b;
        b=c;
    }
    return 0;
}
```

OUTPUT:

Enter a number

6

1 2 3 5 8